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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,589	12/28/2001	Stephen T. Kuehn	S16.12-0128	1702
27367 7590 03/09/2007 WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3319			EXAMINER ROANE, AARON F	
			ART UNIT 3739	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			03/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/034,589	Applicant(s) <span style="float: right;">Y8</span> KUEHN ET AL.	
	Examiner Aaron Roane	Art Unit 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5, 6 and 8-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 8-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 6, 8 and 10-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garrison et al. (USPN 5,972,030) in view Parker (USPN 6,315,488).

Regarding claims 1, 12 and 15, Garrison et al. disclose an apparatus that can hold an annuloplasty ring including: a) a ring fixture body (70 and all analogous counterparts in other embodiments) configured to hold an annuloplasty ring, the ring fixture body having a first opening (106 and all analogous counterparts in other embodiments) and a first outer gripping surface (73); b) a tip coupling (80 and all analogous counterparts in other embodiments) slidably mounted to the ring fixture body configured to couple to the tip of a handle, wherein tip coupling includes a second opening (86 and all analogous counterparts in other embodiments) and a second outer gripping surface (outer surface of 80 and all analogous counterparts in other embodiments) opposed to the first outer gripping surface; c) a handle (28); and d) a release mechanism (various types of

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interconnection means listed in beginning on col. 18, line 60 and ending on col. 19, line 2) coupled to the tip coupling (82), a non-circular slot or opening, see col. 14-18.

However, Garrison et al. fail to recite a holder body configured to hold the annuloplasty ring, the holder body having a first opening for receiving a tip of a handle and a first outer finger gripping surface facing in a first direction; and a handle coupling having a second outer finger gripping surface facing in a direction opposed to the first direction and having a second opening that is transversely misaligned with the first opening until the gripping surfaces are squeezed together, sliding the handle coupling relative to the holder body to release the tip. Garrison et al. do however disclose a wide variety of coupling mechanisms for coupling the tool (10) to the ring fixture body (70 and other analogous counterparts in other embodiments), see figures 1-34. Parker discloses a separable instrument/tool system and teaches providing the device (10) with a "snap-in handle assembly" comprising a holder body (40), the holder body having a first opening (50) for receiving a tip (20) of a handle and a first outer finger gripping surface (exterior surface of 52) facing in a first direction; and a handle coupling in the form of a clip (60) having a second outer finger gripping surface (portion of 60 joining 66 and 67 and on the same side as 51) facing in a direction opposed to the first direction and having a second opening (defined by 64) that is transversely misaligned with the first opening until the gripping surfaces are squeezed together, sliding the handle coupling relative to the holder body to release the tip, in order to provide a quick release coupling mechanism, see col. 2, line 44 through col. 4, line 62 and figures 1-6. Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the invention of

Garrison et al., as taught by Parker, to provide the ring fixture body and a tip coupling that works in the manner defined by Parker and with the structural features detailed by Parker in order to provide an alternate/equivalent mechanism of quick release coupling the tool shaft to the ring fixture body.

Regarding claims 2, 3, 5, 6 and 8, Garrison et al. in view of Parker disclose the claimed invention, see Parker col. 3 and 4 and figures 1-6.

Regarding claim 10, Garrison et al. in view of Parker disclose the claimed invention, see Parker col. 3 and 4 and figures 1-6.

Regarding claims 11 and 16, Garrison et al. in view of Parker further disclose the handle coupling is configured to slide within the holder body in a direction generally parallel with a plane of the holder body, see Parker col. 3 and 4 and figures 1-6.

Regarding claim 13, Garrison et al. in view of Parker further disclose a tip of the handle includes a protuberance configured to engage the handle coupling, see Parker col. 3 and 4 and figures 1-6, wherein Parker discloses the tip protuberance (24).

Regarding claim 14, Garrison et al. in view of Parker further disclose the release mechanism comprises a button, see Parker col. 3 and 4 and figures 1-6, wherein Parker discloses the button (the raised circular pattern on 60, see figures 1-5).

Regarding claims 17 and 20, Garrison et al. disclose a handle (10) comprising an elongate shaft (20), a gripping portion (28) that includes ribs (the ribbed or grooved button 30 section with the handle 28) and a tip (26) coupled to the other end of the elongate shaft (with respect to the gripping portion), see col. 12 and figures 1-4. It should be noted that the tip disclosed by Garrison et al. has many walls (flat surfaces), see figure 2.

Regarding claim 18, Garrison et al. further disclose flat portions various flat sections on 28) on the handle, see figure 1.

Regarding claim 19, Garrison et al. further disclose a tip with walls (flat sides in 36 and 39 are located) that are aligned with some of the flat portions on the handle (the side flat surfaces 90° away from the flat portion with the button therein), see figures 1 and 2.

Regarding claim 21, Garrison et al. in view of Parker disclose the claimed invention. Parker discloses a tip (24) having tapered walls (25), see figures 3, 5 and 6.

Regarding claims 22 and 23, Garrison et al. in view of Parker disclose the claimed invention. Parker discloses the second opening in the handle coupling is slidable relative to the holder body between a lock position where the handle tip engages the second opening and an unlock position where the handle tip is released from the second opening and the handle coupling further comprises a release mechanism (a button, the raised circular pattern on 60, see figures 1-5) to move the handle coupling between the lock and

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unlock positions, thereby releasing the handle tip from the handle coupling, see col. 3 and 4 and figures 1-6.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garrison et al. (USPN 5,972,030) in view Parker (USPN 6,315,488) as applied to claim 1 above, and further in view of Carstens (USPN 4,863,201).

Regarding claim 9, Garrison et al. in view of Parker disclose the claimed invention except for the tapered opening. Carstens discloses a quick release coupling using relatively moved openings (openings in 36 and 94) and teaches providing opening 36 with tapered walls in order to receive a tapered tip (20), see col. 4-5 and figures 1-8. Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the invention of Garrison et al. in view of Parker, as taught by Carstens, to provide a tapered opening in order to receive the tapered tip.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-3, 5, 6 and 8-23 have been considered but are moot in view of the new ground(s) of rejection. Applicant has amended claim 1 which necessitated the provision of new prior art (Parker).

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Roane whose telephone number is (571) 272-4771. The examiner can normally be reached on Monday-Thursday 7AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Aaron Roane  
March 1, 2007

*A.R.*

*Roy D. Gibson*  
ROY D. GIBSON  
PRIMARY EXAMINER